

FORM PTO-1449
(REV. 7-80)

71477 U.S. PTO

ATTY. DOCKET NO.
LKS95-10SERIAL NO.
08/700INFORMATION DISCLOSURE CITATION
IN AN APPLICATION

02/13/97

APPLICANT
P.D. Ponath, et al.

MAR 03 1997

FILING DATE
August 15, 1996GROUP
~~1800~~ 1806

GROUP 1800

U.S. PATENT DOCUMENTS

EXAM- INER INI- TIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB- CLASS	FILING DATE IF APPROPRIATE
gk	AA	5,558,864	24 September 1996	Bendig et al.	424	133.1	
gk	AB	5,225,539	6 July 1993	Winter	530	387.3	
gk	AC	5,585,089	17 December 1996	Queen et al.	424	133.1	

FOREIGN PATENT DOCUMENTS

		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB- CLASS	TRANSLATION YES NO
gk	AL	WO 93/02191	4 February 1993	PCT			
gk	AM	WO 91/09967	11 July 1991	PCT			

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

gk	AR	Lazarovits, A.I. and Karsh J., " $\alpha 4\beta 7$ integrin in rheumatoid arthritis," In <i>Leucocyte Typing V - White Cell Differentiation Antigens</i> , S.F. Schlossman et al., eds., (Oxford: Oxford University), pp. 1686, 1687 (1995).
gk	AS	Lazarovits, A.I., et al., "Lymphocyte Activation Antigens - I. A Monoclonal Antibody, Anti-Act I, Defines a New Late Lymphocyte Activation Antigen," <i>The Journal of Immunology</i> , 133:1857-1862 (1984).
gk	AT	Erle, D.J., et al., "Expression and Function of the MAdCAM-1 Receptor, Integrin $\alpha 4\beta 7$, on Human Leukocytes," <i>The Journal of Immunology</i> , 153:517-528 (1994).
gk	AU	Postigo, A.A., et al., " $\alpha 4\beta 7$ Integrin Mediates B Cell Binding to Fibronectin and Vascular Cell Adhesion Molecule-1," <i>The Journal of Immunology</i> , 151:2471-2483 (1993).
gk	AV	Lazarovits, A.I. and Karsh, J., "Differential Expression in Rheumatoid Synovium and Synovial Fluid of $\alpha 4\beta 7$ Integrin - A Novel Receptor for Fibronectin and Vascular Cell Adhesion Molecule-1," <i>The Journal of Immunology</i> , 151:6482-6489 (1993).
gk	AW	Schweighoffer, T., et al., "Selective Expression of Integrin $\alpha 4\beta 7$ on a Subset of Human CD4 ⁺ Memory T Cells with Hallmarks of Gut-Trophism," <i>The Journal of Immunology</i> , 151:717-729 (1993).
gk	AX	Riechmann, L., et al., "Reshaping human antibodies for therapy," <i>Nature</i> , 332:323-327 (1988).
gk	AY	Bendig, M.M., "Humanization of Rodent Monoclonal Antibodies by CDR Grafting," <i>METHODS: A Companion to Methods in Enzymology</i> , 8:83-93 (1995).
gk	AZ	Page, M.J. and Sydenham, M.A., "High Level Expression of the Humanized Monoclonal Antibody Campath-1H in Chinese Hamster Ovary Cells," <i>Bio/Technology</i> , 9:64-68 (1991).

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DATE CONSIDERED

6/2/97

FORM PTO-1449
(REV. 7-80)INFORMATION DISCLOSURE CITATION
IN AN APPLICATION

(Use several sheets if necessary)

ATTY. DOCKET NO.
LKS95-10SERIAL NO.
08/700,737APPLICANT
P.D. Ponath, et al.FILING DATE
August 15, 1996GROUP
~~1804~~ 1816

U.S. PATENT DOCUMENTS

EXAM- INER INI- TIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB- CLASS	FILING DATE IF APPROPRIATE

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

gk	AR2	Bednarczyk, J.L., et al., "Identification of a Combinatorial Epitope Expressed by the Integrin $\alpha 4\beta 1$ Heterodimer Involved in the Regulation of Cell Adhesion," <i>J. Biol. Chem.</i> , 269:8348-8354 (1994).					
gk	AS2	Yacyshyn, B.R., et al., "Crohn's Disease, Ulcerative Colitis, and Normal Intestinal Lymphocytes Express Integrins in Dissimilar Patterns," <i>Gastroenterology</i> , 107:1364-1371 (1994).					
gk	AT2	Pals, S.T., et al., "Expression of the Mucosal Homing Receptor $\alpha 4\beta 7$ in Malignant Lymphomatous Polyposis of the Intestine," <i>Gastroenterology</i> , 107:1519-1523 (1994).					
gk	AU2	Teague, T.K., et al., "Integrin $\alpha 4\beta 7$ Co-Stimulation of Human Peripheral Blood T Cell Proliferation," <i>Cell Ad. Comm.</i> , 2:539-547 (1994).					
gk	AV2	Tiisala, S., et al., " $\alpha E\beta 7$ and $\alpha 4\beta 7$ integrins associated with intraepithelial and mucosal homing, are expressed on macrophages," <i>Eur. J. Immunol.</i> , 25:411-417 (1995).					
gk	AW2	Wan, H.C., et al., "Expression of $\alpha 4\beta 7$ Integrin on Eosinophils and Modulation of $\alpha 4$ -Integrin-Mediated Eosinophil Adhesion via CD4," <i>Int. Arch. Allergy Immunol.</i> , 107:343-344 (1995).					

EXAMINER

Elizabeth Raben

DATE CONSIDERED

6/2/97

FORM 10-1449
(REV. 7-94)ATTY. DOCKET NO.
LKS95-10SERIAL NO.
08/700,737INFORMATION DISCLOSURE CITATION
IN AN APPLICATION
1997

APPLICANTS Paul D. Ponath, et al.

FILING DATE
August 15, 1996GROUP
1804

(Use several sheets if necessary)

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EXAM- INER INI- TIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB- CLASS	FILING DATE IF APPROPRIATE
EL	AD	5,403,919	04-APR-95	Butcher, E.C.	530	388.22	03 MAR 93
EL	AE	4,816,567	28-MAR-89	Cabilly et al.	530	387	08 APR 83
	AF						
	AG						
	AH						
	AI						
	AJ						

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		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB- CLASS	TRANSLATION YES NO
EL	AN	0 303 463 B1	30-11-94	EPO			
EL	AO	94/13312	23-06-94	PCT			
EL	AP	90/07321	12-07-90	PCT			
EL	AQ	95/19790	27-07-95	PCT			
EL	AL2	93/15764	19-08-93	PCT			
EL	AM2	94/16094	21-07-94	PCT			

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EL	AX2	Berg, E.L., et al., "L-Selectin-Mediated Lymphocyte Rolling on MAdCAM-1", Nature, 366:695-698 (1993).
EL	AY2	Berlin, C., et al., " α 4 Integrins Mediate Lymphocyte Attachment and Rolling under Physiologic Flow", Cell, 80:413-422 (1995).
EL	AZ2	Yang, Y., et al., "Construction and Adhesive Properties of a Soluble MAdCAM-1-Fc Chimera Expressed in a Baculovirus System: Phylogenetic Conservation of Receptor-Ligand Interaction", Scand. J. Immunol., 42:235-247 (1995).
EL	AR3	Hamann, A., et al., "Role of α 4-Integrins in Lymphocyte Homing to Mucosal Tissues In Vivo", J. of Immunology, 152:3282-3293 (1994).

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Zachary Robison

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6/2/97

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ATTY. DOCKET NO.
LKS95-10SERIAL NO.
08/700,737

APPLICANTS Paul D. Ponath, et al.

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FILING DATE
August 15, 1996

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U.S. PATENT DOCUMENTS

EXAM- INER INI- TIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUB- CLASS	FILING DATE IF APPROPRIATE

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

ER	AS3	Podolsky, D.K., et al., "Attenuation of Colitis in the Cotton-top Tamarin by Anti- α 4 Integrin Monoclonal Antibody", <i>J. Clin. Invest.</i> , 92:372-380 (1993).
ER	AT3	Podolsky, D.K., "Inflammatory Bowel Disease (First of Two Parts)", <i>The New England J. of Med.</i> , 325(13):928-937 (1991).
ER	AU3	Podolsky, D.K., "Inflammatory Bowel Disease (Second of Two Parts)", <i>The New England J. of Med.</i> , 325(14):1008-1016 (1991).
ER	AV3	Springer, T.A., "The Sensation and Regulation of Interactions with the Extracellular Environment: The Cell Biology of Lymphocyte Adhesion Receptors", <i>Annu. Rev. Cell Biol.</i> , 6:359-402 (1990).
ER	AW3	Picker, L.J. and Butcher, E.C., "Physiological and Molecular Mechanisms of Lymphocyte Homing", <i>Annu. Rev. Immunol.</i> , 10:561-591 (1992).
ER	AX3	Hynes, R.O., "Integrins: Versatility, Modulation, and Signaling in Cell Adhesion", <i>Cell</i> , 69:11-25 (1992).
ER	AY3	Berlin, C., et al., " α 4 β 7 Integrin Mediates Lymphocyte Binding to the Mucosal Vascular Addressin MAdCAM-1", <i>Cell</i> , 74:185-195 (1993).
ER	AZ3	Springer, T.A., "Traffic Signals for Lymphocyte Recirculation and Leukocyte Emigration: The Multistep Paradigm", <i>Cell</i> , 76:301-314 (1994).
ER	AR4	Briskin, M.J., et al., "MAdCAM-1 Has Homology to Immunoglobulin and Mucin-Like Adhesion Receptors and to IgA1", <i>Nature</i> , 363:461-463 (1993).
ER	AS4	Salmi, M., et al., "Aberrant Binding of Lamina Propria Lymphocytes to Vascular Endothelium in Inflammatory Bowel Diseases", <i>Gastroenterology</i> , 106:596-605 (1994).

EXAMINER

Evelyn Robin

DATE CONSIDERED

6/2/97

FORM PTO-1449 (REV. 7-80) INFORMATION DISCLOSURE CITATION IN AN APPLICATION (Use several sheets if necessary)			ATTY. DOCKET NO. LKS95-10		SERIAL NO. 08/700-737 <div style="text-align: right; font-weight: bold; font-size: 1.2em;">RECEIVED</div> <div style="text-align: right; font-weight: bold;">MAY 29 1997</div>		
			APPLICANTS Paul D. Ponath, et al.				
			FILING DATE August 15, 1996		GROUP 18047 GROUP 1800		
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EXAM- INER INI- TIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB- CLASS	FILING DATE IF APPROPRIATE
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gk	AT4	Silber, A., et al., "Recruitment of Lymphocytes during Cutaneous Delayed Hypersensitivity in Nonhuman Primates is Dependent on E-Selectin and Vascular Cell Adhesion Molecule 1", <i>J. Clin. Invest.</i> , 93:1554-1563 (1994).					
gk	AU4	Salmi, M., et al., "Dual Binding Capacity of Mucosal Immunoblasts to Mucosal and Synovial Endothelium in Humans: Dissection of the Molecular Mechanisms", <i>J. Exp. Med.</i> , 181:137-149 (1995).					
gk	AV4	Andrew, D.P. et al., "Distinct but Overlapping Epitopes Are Involved in $\alpha_4\beta_7$ -Mediated Adhesion to Vascular Cell Adhesion Molecule-1, Mucosal Addressin-1, Fibronectin, and Lymphocyte Aggregation", <i>J. of Immunology</i> , 153:3847-3861 (1994).					
gk	AW4	Osband, M.E. and Ross, Susan, "Problems in the Investigational Study and Clinical Use of Cancer Immunotherapy", <i>Immunol. Today</i> , 11(6):103-105 (1990).					
gk	AX4	Waldmann, T.A., "Monoclonal Antibodies in Diagnosis and Therapy", <i>Science</i> , 252:1657-1662 (1991).					
gk	AY4	Harris, W.J. and Emery, S., "Therapeutic Antibodies-The Coming of Age", <i>TIBTECH</i> , 11:42-44 (1993).					
EXAMINER		<div style="font-family: cursive; font-size: 1.2em;">Evelyn Raben</div>					
		DATE CONSIDERED <div style="font-size: 1.2em;">6/2/97</div>					